

NNCI Education and Outreach

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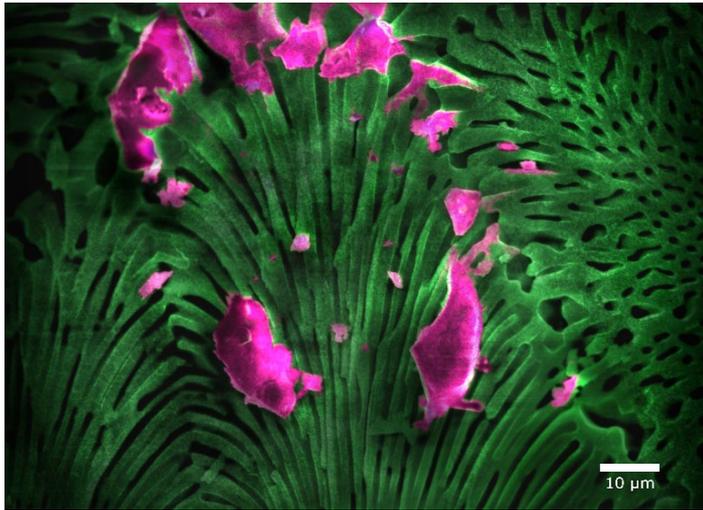
Associate Director of Education, National Nanotechnology
Coordinated Infrastructure

NNCI Education and Outreach Mission

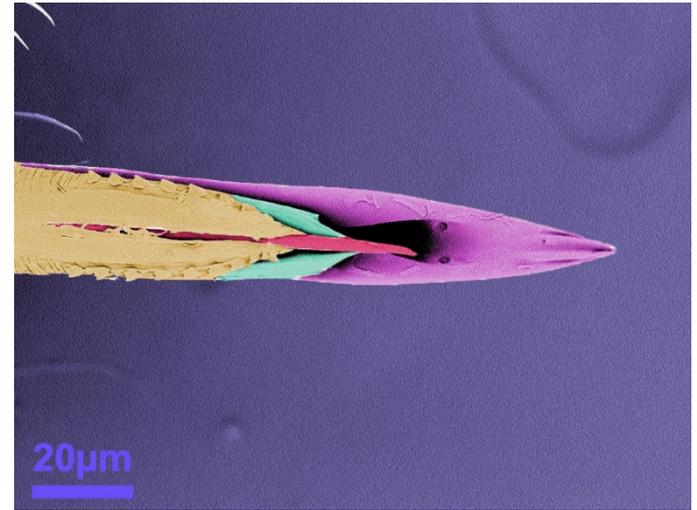
- Offer education and training to address the growing need for a skilled workforce and informed public
- Provide resources, programs, and materials to enhance knowledge of nanotechnology and its application to real-world issues
- Support the US economy by enabling a STEM-literate workforce ready to meet the technological challenges of a nano-enabled economy as well as an informed citizenry that supports continued and safe growth of nanotechnologies

Plenty of Beauty at the Bottom

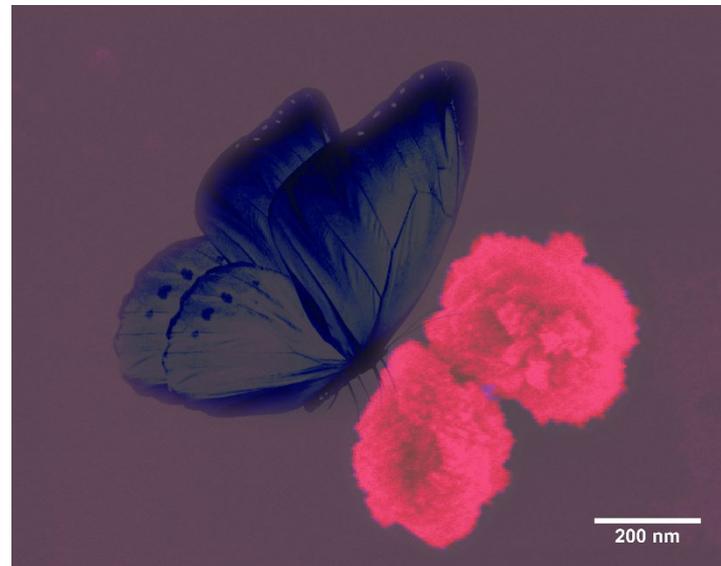
Most Stunning - MANTH



Most Unique Capability - RTNN



Most Whimsical - SENIC



NNCI E&O



NNCI E&O list of activities Aug 2019- July 2020 ☆ 📅 ☁

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	A	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	NNCI Site	Type of Activity:																
2		K-12 onsite tours	K-12 offsite visits	K-12 camps	K-12 afterschool program	RET	Teacher workshop	REU	High School Interns	Student Interns (student workers, cc/tc student interns - not REU students)	Open House	Short Courses/ workshops	Seminars	Conferences	Online Courses	Labs for students of local CC	Remote Access to SEM	Science Outside the Lab
3	SENIC	x	x	x		x	x	x	x	x		x	x					student participated 2019
4	nano@stanford	x	x				x			x		x	x		x			x
5	NanoEarth	x		x			x					x	x	x				
6	SHyNE					x			x		x	x	x					
7	TNF	x	x					x	x	x		x	x	x	x	x		
8	MANTH	x						(canceled 2020)		x (2019; re-started July 2020)		x	x	x		x		(students 2019; & accepted 2020)
9	RTNN	x	x	x		x (separate NSF award)	x			x		x		x	x		x	
10	NCI-SW	(canceled 2020)				(canceled 2020)		x			x		x			x	x	(canceled 2020)
11	NNF	x	x	x	x		x	x	x	x		x	x	x		x		
12	SDNI	x	x			x	x	x		x	x	x	x	x		x	x	
13	KY Multiscale	x			(canceled 2020)				(canceled 2020)	x	x	x	x					
14	CNS - Harvard																	
15	CNF	(cancelled 2020)	x					(cancelled 2020)	One 4H intern			(cancelled 2020)						
16	MINIC	x	x	(canceled 2020)	x	(canceled 2020)	x			x		(canceled 2020)	x					
17	MONT	x	x	(canceled 2020)			x	(canceled 2020)		x	(canceled 2020)	x	x					
18																		

NNCI E&O



From August 2019 through July 2020

Reached over 32,000 people through in-person or virtual activities

Does not include NanoEarth's Pulse of the Planet program or NNF's traveling museum exhibit (~37,000 visitors), RTNN's Coursera (10,535 registered), or CNF's *Nanooze*

Drop from last year's 63,000

NNCI E&O

Audience	Ex. Activities	This Year	Last Year
K12 Students	Remote Sessions	18,600	35,300
	Class Trips		
	Camps		
	Tours		
K12 Teachers	Workshops	800	1,500
	Conferences		
	RET		
General Public	Festivals	3,800	17,700
	Science Days		
	NND Events		
Professionals	Student Interns	8,800	8,600
	REU		
	Short Courses		
	Conferences		
	Seminars		

Resources for Educators (K-16)

Searchable K-16 Curriculum Materials

Search the database of curricular materials by subject area and/or education level. (Listing in table format is provided below.)

Opportunities for Educators at NNCI Sites

Explore a variety of hands-on professional development opportunities for teachers offered by NNCI supported facilities.

NNCI Resources for Virtual Classrooms, Kitchens, Backyards, and Beyond

See the list of resources including videos, online magazines, podcasts, and activities that can be done from home using common items.

Demo Guide and Information Sheets

Look for easy demonstrations to explain nanotechnology concepts during outreach events.

K-12 Reference Sheets

[Biology Reference Sheet](#)
[Chemistry Reference Sheet](#)
[Genetics & Cell Division Reference Sheet](#)
[Physical Science Reference Sheet](#)
[Physics Reference Sheet](#)

Additional Resources

[NNCI Teacher Resource Brochure](#)
[Size and Scale Poster](#)
[External Nano-Education Resources](#)
[SDNI-Hosted NNCI Education Symposium](#)

K-16 Curriculum Materials (Searchable Listing)

Lesson Name	Subject Area	Grade Level
Achoo! Pollen Makes US More than Sneeze	General Science; Physical Science; Biology	Middle



NNCI Curriculum Materials

Search all of our materials here

Search here...

Subject

Education Level

You may select more than one Subject option.

You may select more than one Education Level option.

GO

RESET

Search Results

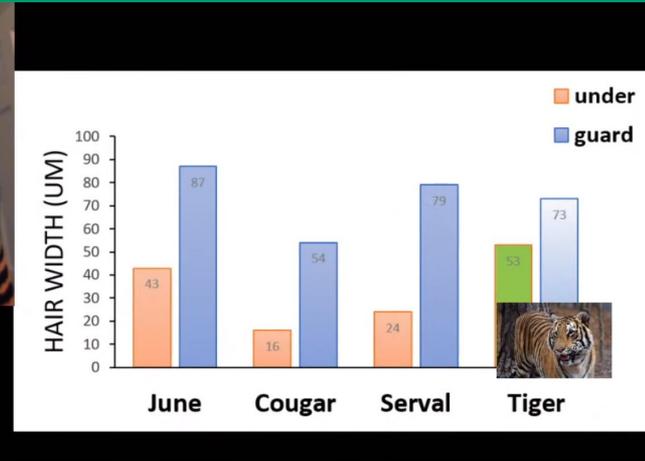
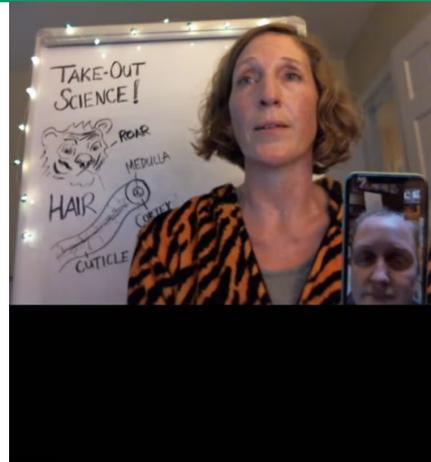
NNCI - Virtual Outreach Best Practices

Safety	1
Video & Interactive Platforms	1
Online Interactive Add Ons	1
Marketing	2
Teacher Preferences	2
Impact / Assessment / Evaluation	3
Curriculum / Content	3
Equipment / Resources	5
Hardware	5
Online	5
Miscellaneous	5

Feel free to add more information by emailing Angela Hwang (aahwang@stanford.edu) or the commenting / suggesting feature on Google Docs.

Highlights

- Networked RET (SENIC, MiNiC, NNF, SHyNE)
- Virtual summer workshops for teachers
- Take-out Science
- Partnering w/ other orgs. to distribute materials
- Hands-on labs for cc students
- Expanding outreach into new communities
- And still providing outreach both in-person & virtually!



Taking your questions now! www.go.ncsu.edu/takeout-science
email: rtnanonetwork@ncsu.edu Twitter: @RTNNSocial

Research Triangle Nanotechnology Network
A partnership between Duke University, NC State University, and UNC Chapel Hill

Thank You!

Questions?